Abstract Submitted
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Pion Form Factor from Exclusive π^+ Production at EIC[1] GARTH HUBER, ZAFAR AHMED, Univ of Regina — The charged pion form factor, $F_\pi(Q^2)$, is an important quantity which can be used to advance our knowledge of hadronic structure. Planned measurements from Jefferson Lab are expected to provide precise data over $0.38 < Q^2 < 6.0$ GeV^2 via the electroproduction method, and up to $Q^2 = 8.5$ GeV^2 with somewhat lower precision provided non-pole backgrounds are sufficiently small. The Electron-Ion Collider may allow the extension of these measurements up to $Q^2 = 35$ GeV^2, which would enable the direct observation of QCD's transition from confinement-dominated physics at large length-scales to perturbative physics at short-length scales. The initial studies of these possible measurements, using a generator we have written specifically for this purpose, will be presented. Some of the difficulties making L/T-separated cross sections at the EIC impractical, and their possible resolution, will also be discussed.

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